

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) An electronic module, comprising:
a monolithic microelectronic substrate including a plurality of integrated circuit dice and a redistribution structure thereon providing an edge connector contact coupled to at least one of the plurality of integrated circuit dice, the edge connector contact configured for mating with a contact of an edge connector that is configured to engage an edge of the substrate.
2. (Canceled)
3. (Original) A module according to Claim 1, wherein the monolithic substrate comprises a plurality of unseparated integrated circuit dice.
4. (Previously Presented) A module according to Claim 1, wherein the redistribution structure is configured to provide a passive electronic device electrically coupled to at least one of the plurality of integrated circuit die.
5. (Original) A module according to Claim 4, wherein the passive electronic device comprises a capacitor, a resistor and/or an inductor.
6. (Original) A module according to Claim 1, wherein the redistribution structure comprises a land configured to provide electrical connection to a contact pad of an electronic device mounted on the substrate.
7. (Original) A module according to Claim 6, further comprising an electronic device mounted on the substrate and having a contact pad electrically coupled to the land.

8. (Original) A module according to Claim 1, further comprising a support layer affixed to a surface of the monolithic substrate and configured to support the connector contact.

9. (Original) A module according to Claim 8, wherein the support layer is configured to serve as a heat sink.

10. (Original) A module according to Claim 1, further comprising a protection layer affixed to a surface of the monolithic substrate.

11. (Original) A module according to Claim 10, wherein the protection layer is configured to serve as a heat sink.

12. (Previously Presented) An electronic module, comprising:
a microelectronic substrate including a plurality of integrated circuit dice therein ; and
a redistribution structure comprising interleaved conductive and insulation layers formed on the plurality of integrated circuit dice, the redistribution structure extending across a surface of the substrate to overlie at least portions of each of the plurality of integrated circuit dice and including at least one conductive layer including a compressive connector contact opposite the surface of the substrate and coupled to the at least one of the plurality of integrated circuit dice.

13. (Previously Presented) A module according to Claim 12, wherein the connector contact comprises an edge connector contact configured for mating with a contact of an edge connector that is configured to engage an edge of the substrate.

14. (Previously Presented) A module according to Claim 12, wherein the plurality of integrated circuit dice comprises a plurality of unseparated integrated circuit dice.

15. (Previously Presented) A module according to Claim 12, wherein the redistribution structure is configured to provide a passive electronic device electrically coupled to at least one of the plurality of integrated circuit dice.

16. (Original) A module according to Claim 15, wherein the passive electronic device comprises a capacitor, a resistor and/or an inductor.

17. (Currently Amended) A module according to Claim 11, wherein the redistribution structure comprises at least one conductive layer configured to provide electrical connection to a contact pad of an electronic device mounted on the substrate.

18. (Original) A module according to Claim 17, further comprising an electronic device mounted on the substrate and having a contact pad electrically coupled to the at least one conductive layer.

19. (Original) A module according to Claim 12, further comprising a support layer affixed to a surface of the monolithic substrate and configured to support the connector contact.

20. (Original) A module according to Claim 19, wherein the support layer is configured to serve as a heat sink.

21. (Original) A module according to Claim 12, further comprising a protection layer affixed to a surface of the substrate.

22. (Original) A module according to Claim 21, wherein the protection layer is configured to serve as a heat sink.

23. (Previously Presented) An article of manufacture, comprising:
a wafer having a plurality of integrated circuit dice therein and a redistribution structure extending across a surface of the wafer to overlie at least portions of each of the plurality of integrated circuit dice, the redistribution structure including a connector contact facing opposite the surface of the wafer and coupled to at least one of the plurality of integrated circuit dice.

24. (Original) An article according to Claim 23, wherein the wafer comprises a plurality of groups of integrated circuit dice and a plurality of redistribution structures disposed on and coupled to respective ones of the groups of integrated circuit dice, each of the redistribution structures including a connector contact.

25. (Original) An article according to Claim 24, wherein the plurality of groups of integrated circuit dice and associated redistribution structures are separable into a plurality of modules.

26. (Original) An article according to Claim 25, wherein the connector contacts of the respective redistribution structures are configured to provide edge connector contacts for the respective modules.

27. (Previously Presented) An electronic module, comprising:
a monolithic microelectronic substrate including a plurality of unseparated integrated circuit dice and a multilayer redistribution structure comprising interleaved conductive and insulation layers, the redistribution structure extending across a side of the substrate to overlie at least portions of each of the plurality of unseparated integrated circuit dice, the redistribution structure including at least one conductive layer including an edge connector contact facing opposite the side of the substrate and electrically coupled to at least one of the plurality of integrated circuit dice.

28. (Original) A module according to Claim 27, further comprising a protection layer affixed to the substrate.

29. (Original) A module according to Claim 28, wherein the protection layer is configured to support the edge connector contact.

30. (Original) A module according to Claim 28, wherein the edge connector contact is disposed adjacent an edge of the substrate, and wherein the protection layer is disposed on a surface of the substrate opposite the redistribution structure and underlies the edge connector contact.

31. (Original) A module according to Claim 28, wherein the protection layer is configured to serve as a heat sink.

32. (Original) A module according to Claim 28, wherein the protection layer comprises at least one of a metal layer or a thermally conductive polymer layer.

33. (Original) A module according to Claim 28, wherein the protection layer comprises first and second protection layers affixed to respective ones of the substrate and the redistribution structure.

34. (Original) A module according to Claim 27, wherein the plurality of unseparated integrated circuit dice comprises a plurality of integrated circuit memory devices.

35. (Original) A module according to Claim 27, wherein the redistribution structure provides interconnections among the plurality of integrated circuit dice.

36. (Original) A module according to Claim 27, wherein the redistribution structure comprises a passive electronic device.

37. (Original) A module according to Claim 36, wherein the passive electronic device comprises a capacitor, a resistor and/or an inductor.

38. (Currently Amended) A module according to Claim 2737, wherein the redistribution structure includes at least one conductive layer configured to provide an electrical contact for an electronic device mounted on the substrate.

39. (Original) A module according to Claim 38, further comprising an electronic device mounted on the substrate and in electrical contact with the at least one conductive layer.

40-59. (Cancelled)

60. (Previously Presented) An electronic module comprising:
a monolithic microelectronic substrate comprising a plurality of unseparated integrated circuit dice therein and a redistribution structure comprising interleaved conductive and insulating layers disposed on the plurality of integrated circuit dice, the redistribution structure comprising a row of connector contacts disposed adjacent and extending along an edge of the substrate and electrically coupled to the plurality of integrated circuit dice.

61. (Previously Presented) The module of Claim 60, wherein the respective contacts of the row of connector contacts are configured to mate with respective contacts of an edge connector that is configured to engage an edge of the substrate.

62. (Previously Presented) The module of Claim 60, wherein the connector contacts provide solderless connection to the integrated circuit dice.